



In re Application of :  
Michael SCHMIDT et al. : Group Art Unit: 1626  
Serial No.: 09/877,259 : Examiner: Laura L. Stockton  
Filed: June 11, 2001 :  
For: IONIC LIQUIDS II

**PETITION TO THE COMMISSIONER UNDER 37 CFR § 1.181, REQUESTING  
WITHDRAWAL OF REQUIREMENT FOR RESTRICTION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SIR:

**Relief Requested**

This is a petition courteously submitted under 37 CFR § 1.181, requesting the Commissioner, through the Honorable Group Director, to instruct the Examiner to withdraw the Restriction Requirement of November 15, 2004.

**Statement of Facts**

On February 10, 2003, the Examiner issued an Office Action setting forth a Restriction Requirement. In the Restriction, the claims were grouped as follows: Group I, claims 1-7; Group II, claims 8, 10 and 11; and Group III, claim 9. Group I was said to be drawn to an ionic liquid. Group II, was said to be drawn to an electrochemical cell, and an electrolyte composition. Group III was said to be drawn to a capacitor. The groups of claims were said to be related as "mutually exclusive species in an intermediate-final product relationship." In addition to the Restriction Requirement, the Examiner also made an Election of Species Requirement.

On March 6, 2003, Applicants filed an Election and Amendment. In this paper, Applicants elected Group I as the elected invention and selected the compound 1-ethyl-3-methylimidazolium tris(pentafluoroethyl)-trifluorophosphate as the elected species. The

Restriction Requirement was traversed on grounds that the inventions were not related as intermediate-final product but instead were related as subcombination - combination. Thereafter, the Examiner issued a further Office Action on April 21, 2003. In this Office Action, the Examiner again restated the Restriction. However, the Examiner agreed with Applicants' prior arguments that the groups were not related as intermediate-final product. Instead, the Examiner gave a new reasoning in support of the Restriction. Specifically, the Examiner asserted that group I and groups II and III were related as products and process of use.

In the Reply filed July 21, 2003, Applicants again traversed the Restriction Requirement. Applicants argued that the claims of Group I and the claims of Groups II and III are not related as product and process of use, since none of claims 8-11 were process claims. In the Office Action of December 17, 2003, the Examiner responded that Groups II and III were drawn to electrochemical cells and capacitors, respectively, that employ the ionic liquid of Group I in them, and thus Groups II and III "are in fact is [sic] a process for using the compounds of group I."

Applicants filed its first Petition under 37 CFR § 1.181 on June 10, 2004, requesting that the April 21, 2003 Restriction Requirement be withdrawn and the claims of Groups II and Groups III be examined with the elected claims of Group I. This Petition was granted July 30, 2004. In the Petition Decision it was stated that:

"It is noted that there are many core structures encompassed by Group I. The examiner may reevaluate [sic] the propriety of a restriction requirement among said structures."

On July 28, 2004, Applicants filed a Request for Continued Prosecution (RCE). Following the filing of the RCE and the issuance of the Decision on the Petition, the Examiner issued a new Restriction Requirement in which claim 1 was split into 8 groups, based on the subformulas for cation  $K^+$ . In addition to the Restriction Requirement, the Examiner also made an Election of Species Requirement. Group I was said to be classified in class 546, subclass 22+. Group II was said to be classified in class 544, subclass 232. Group III was said to be classified in class 544, subclass 243. Group II was said to be classified in class 544, subclass 337. Finally, Groups V-VII were said to be classified in class 544, subclass 112+.

Applicants filed a further Election on December 1, 2004 in which Applicants elected

Group V wherein group K<sup>+</sup> is an imidazolium cation. With respect to the election of species requirement, Applicants selected 1-ethyl-3-methylimidazolium tris(pentafluoroethyl)-trifluorophosphate as the elected species (the same species previously elected in the Election filed March 6, 2003). In addition, Applicants requested withdrawal of the new Restriction. In particular, Applicants argued, among other things, that: the equities clearly favored withdrawal of the Restriction; little if any burden imposed in examining the full scope of Applicants claimed genus; and that the Restriction Requirement is improper because it seeks to restrict *within* a claim.

The Examiner responded in the Office Action of February 16, 2005 by making the Restriction final. The Examiner argued that separate searches are required for the different groups, citing the different search classes and subclasses assigned for each group. The Examiner argued that section 121 provides the Commissioner with the authority to restrict applications to several claimed inventions. Further, the Examiner stated that an improper Markush rejection will not be made. Finally, the Examiner cited the statement in the Decision on Petition regarding revaluation based on structures, and concluded that "[t]herefore, restriction between the various heterocyclic rings is proper."

### **Points to be Reviewed**

The points to be reviewed are: whether the restriction within a single claim is proper in light of the decisions by the CCPA in *In re Weber et al.*, 198 USPQ 328 (1978) and *In re Haas et al.*, 198 USPQ 334 (1978); whether the restriction within a claim is proper when it is passed on assertion of a variable group being a "core structure"; whether the restriction within a claim is proper as to Groups V-VII which are all similarly classified; and whether the restriction within a single claim is proper when balancing the equities and considering the little if any evidence of a serious burden imposed on the Examiner.

### **Arguments in Support of Petition**

In this third and newest version of the Restriction, the subject matter of claim 1 is divided into 8 groups, depending on the cation group K. The Examiner argues that "Section 121 provides the Commissioner of Patents and Trademarks with the authority to restrict applications to several claimed inventions when those inventions are found to be independent and distinct." In effect, the Examiner is asserting that, based on 35 USC §121, Applicants are

not entitled to have their claim 1 examined in a single examination. This is directly contrary to the rationale presented by the court in *In re Weber et al.*:

As a general proposition, an applicant has a right to have *each* claim examined on the merits. If an applicant submits a number of claims, it may well be that pursuant to a proper restriction requirement, those claims will be dispersed to a number of applications. Such action would not affect the right of the applicant eventually to have each of the claims examined in the form he considers to best define his invention. If, however, a single claim is required to be divided up and presented in several applications, that claim would never be considered on its merits.

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It is apparent that §121 provides the Commissioner with the authority to promulgate rules designed to *restrict* an *application* to one of several claimed inventions when those inventions are found to be "independent and distinct." It does not, however, provide a basis for an examiner acting under the authority of the Commissioner to *reject* a particular claim on that same basis. [*Weber* at 331-332]

Although the Examiner has characterized her action as a Restriction, rather than a Rejection, the effect is the same. The Examiner is asserting that the authority given to the Commissioner under 35 USC §121 permits the Examiner to require that a single claim "be divided up and presented in several applications" and thus deny the Applicant to have that single claim considered on its merits. This is exactly the action that the Court in *Weber* stated was not permitted under 35 USC §121. The Examiner's actions violate "the basic right of the Applicant to claim his invention as he chooses." [*Weber* at 332]

Moreover, the Examiner has failed to explain why Applicants' claim 1, which defines group K as a Markush group, is not being examined pursuant to the instructions in MPEP §803.02, entitled "Restriction - Markush Claims."

MPEP §803, entitled "Restriction - When Proper," states that "[i]nsofar as the criteria for restriction practice relating to Markush-type claims is concerned, the criteria are set forth in MPEP §803.02." The latter section of the MPEP states that: "[s]ince the decision in *In re Weber*, 580 F.2d 455, 198 USPQ 328 (CCPA 1978) and *In re Haas*, 580 F.2d 461, 198 USPQ 334 (CCPA 1978), it is improper for the Office to refuse to examine that which the Applicants regard as their invention, unless the subject matter in a claim lacks unity of invention."

Thereafter, the MPEP cites *In re Harnish*, 206 USPQ 300 (CCPA 1980) and *Ex parte Hozumi*, 3 USPQ 2d (POBA 1984). These two cases both deal with improper Markush

rejections. Applicants note that the Examiner has stated that no improper Markush rejection will be made. See page 4, line 4 of the February 16, 2005 Office Action.

Thus, examination should proceed in accordance with MPEP §803.02, The proper procedure for examination of a Markush claim, as indicated in section 803.02, is that the examiner may require a provisional election of a single species. Following this election, the MPEP states that "the Markush-type claims will be examined fully with respect to the elected species *and further to the extent necessary to determine patentability.*" [Emphasis added.] The MPEP goes on to state that "should no prior art be found that anticipates or renders obvious the elected species, the search of the Markush-type claim *will be extended.* If prior art is then found that anticipates or renders obvious the Markush-type claim with respect to a non-elected species, the Markush-type claims shall be rejected..."

Thus, in the instant case, the Examiner has made a provisional election of a single species and thus examination should proceed according to section 803.02. No Restriction is necessary or warranted.

Presently, the Examiner has rejected claims on grounds of obviousness. If Applicants ultimately prevail with their arguments of nonobviousness, then the examination search should be extended.

As noted above, the prior Decision on Petition issued July 30, 2004 referred to "many core structures encompassed by Group I." The Examiner cited this statement in support of the assertion that "[t]herefore, restriction between the various heterocyclic rings is proper." However, the statement in the prior Decision did not expressly state that such a Restriction is proper. Moreover, the reference to "many core structures" does not provide a reason as to why Examination is not proceeding in accordance with MPEP §803.02.

Furthermore, Applicants group K, the basis for the Restriction, is not a core structure, it is a variable group. If the Examiner wanted to search a particular structure so as to encompass all of the compounds, it is unclear why the Examiner does not search the anion  $A^-$ ,  $[PF_x(C_yF_{2y+1-z}H_z)_{6-x}]^-$ . It would seem that focusing the search on an anion having a central P atom substituted by one or more F atoms and one or more fluorinated alkyl groups would be a better course of action, rather than focussing on a Markush group of 8 heterocyclic groups.

Finally, the Examiner argues that searching the entire scope would be burdensome because of the different classification of the K groups. But, as mentioned above, the Examiner could focus her search on the anion which presumably would not be classified in

several classes and subclasses. Moreover, the allegation of different classifications is inapplicable to Groups V-VIII, which are all similarly classified.

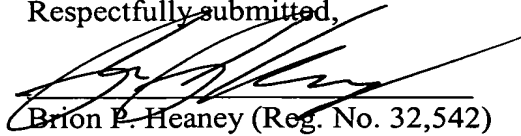
In addition, the art of record does not support the Examiner's assertion of a serious burden. See, e.g., claim 1 of the primary reference Koch et al. wherein the cation of the ionic liquid can be a pyridinium ion, a pyridazinium ion, pyrimidinium ion, a pyrazinium ion, an imidazolium ion, a pyrazolium ion, a thiazolium ion, an oxazolium ion, or a triazolium ion. Thus, in Koch et al. the full scope of the heterocyclic cations was examined. See also Westman (US 6,565,130) wherein claim 5 defines cation  $A^+$  of the salt  $A^+B^-$  as pyridinium, pyridazinium, pyrimidinium, pyrazinium, imidazolium, pyrazolium, thiazolium, oxazolium, isoxazolium, and triazolium ions. So, in Westman too a broad scope of heterocyclic cations was examined. Thus, in this filed of technology, it is clearly not repugnant to scientific classification to group the cations of Applicants' group K together, nor is it a burden to examine the full scope of Applicants' cations.

Moreover, the equities clearly favor withdrawal of the Restriction. It is simply unjust for the Patent and Trademark Office to first maintain an improper Restriction, then force Applicants to go through the effort and cost to Petition the improper Restriction, then acknowledge that the Restriction was improper, and then attempt to again restrict the subject matter to be examined, all the while further delaying examination of Applicants' invention and eroding away Applicants' available patent term.

For the forgoing reasons, Applicants request that the Examiner be directed to withdraw the Restriction Requirement set forth in the Office Action of November 15, 2004.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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